



Great Lakes Fruit, Vegetable & Farm Market EXPO Michigan Greenhouse Growers EXPO

December 4-6, 2018

DeVos Place Convention Center, Grand Rapids, MI



45 Large-Scale Organic Transition

Where: River Overlook Room E & F

MI Recertification Credits: 1 (COMM CORE, PRIV CORE)

OH Recertification Credits: 0.5 (presentations as marked)

CCA Credits: CM (0.5)

Moderator: Zachary Hayden, Michigan State University

- 9:00 AM** **Accessing Market Opportunities for Large Scale Vegetable and Fruit Growers Through Organic Certification**
- Harriet Behar, University of Wisconsin-Madison
- 9:30 AM** **Insect Management in Organic Vegetables (OH 2B, 0.5 hr)**
- Zsofia Szendrei, Michigan State University
- 10:00 AM** **Cultivation Techniques and Machines for Large-Scale Organic**
- Sam Hitchcock Tilton, K.U.L.T. Kress LLC
- 10:30 AM** **Experiences in Large Scale Organic Production**
- Joel Layman, JD Layman Farms Inc.
- 11:00 AM** **Session Ends**

Accessing Market Opportunities for Large Scale Vegetable and Fruit Growers Through Organic Certification



Harriet Behar
Outreach Specialist

Organic and Sustainable Cropping Systems Program, U of WI - Madison

Organic production has moved from a small niche market to one of the fastest growing sectors in the food industry, with almost 50 billion dollars in sales in 2017.

- Fastest growing U.S. food segment – growth rate -----6x that of nonorganic food
- Accounts for more than 5.5% total U.S. food sales
- Organic products sold in at least 90% of mainstream supermarkets

U.S. Organic Food vs. Total Food Sales, Growth and Penetration, 2008-2017

Category	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Organic Food	24,702	32,648	44,714	57,218	71,250	82,228	93,076	107,006	143,101	164,911
Growth %	37.8%	4.3%	8.0%	9.5%	12.2%	12.2%	11.9%	11.3%	9.0%	6.4%
Total Food	659,932	669,556	677,254	713,985	749,450	760,486	797,375	807,999	822,907	822,160
Growth %	4.9%	1.4%	1.2%	5.4%	3.7%	1.7%	1.6%	1.3%	1.8%	1.1%
Organic (as % Total)	3.1%	3.2%	3.4%	3.5%	3.8%	4.1%	4.5%	4.8%	5.2%	5.5%

Source: Organic Trade Association's 2018 Organic Industry Survey conducted 1/25/2018 - 3/26/2018 (\$ml., consumer sales).



Organic
BIG RESULTS from Small Seeds

Organic food and farming has a big impact on the nation's economy. From Kentucky to California, farmers, families, and businesses are choosing organic.

- Total U.S. Organic Sales and Growth, 2008-2017
- Organic food and farming has a big impact on the nation's economy.
- Organic products sold in at least 90% of mainstream supermarkets.
- Organic production has moved from a small niche market to one of the fastest growing sectors in the food industry.

Based on a law passed by Congress in 1990
October 2002
CFR 7 Part 205



www.ams.usda.gov/nop



PLU numbers – not gov't mandated

- Nonorganic- 4 digits
- Organic- 5 digits starting with a 9
- GMO- 5 digits starting with an 8

“Organic” label brings a price premium. Schools, restaurants, food processors and retail stores want regional producers of many types of fruit and vegetables.



Organic Certification Cost Share

Funds distributed through each state's Department of Agriculture

\$750 per year or 3/4 the cost of certification (includes certification fee, all inspection fees and user fees) whichever is LOWER. Payment is per scope, crops, livestock, wild harvest and/or handling

Organic is a production claim.

Organic is about how food is produced and handled.

Organic is not a content claim.

It does not represent that a product is "free" of something.

Organic is not a food safety claim.

Organic is not a judgment about the quality and safety of any product.



Any farmer or processor who sells more than \$5000 annually of organic production, must be **Certified** to use the organic label.



with a yearly inspection to continue their certification.

"Exempt" (non-certified) operations cannot sell crops that are further "processed", this includes livestock feed.

There is no "Transition to Organic" label recognized in the marketplace; there is no organic premium for "transitional".



Exempt from certification organic producers can sell their organic products direct to consumer at farmers markets or roadside stands as well as to retailers or restaurants who will not further process their crops or who will not represent their processed product as organic.

Only CERTIFIED organic operations may use this seal.




As with any business venture, identify your market, their needs, and your capabilities before growing and trying to sell your products.




Organic certification can be on a field by field basis, or only fields and not the livestock- the whole farm's production need not be organic.



- ✓Farmer chooses certification agency and receives application
- ✓Application received by agency
- ✓Agency reviews application and may ask for more information
- ✓Agency assigns inspector, crops must be seen during growing season
- ✓Inspector writes report and sends to agency
- ✓Agency reviews all documentation, and either approves or denies certification, with comments.



A half to full day on-site inspection verifies all information provided on the application, including crops, crop production methods, buffer zones, projected harvest yields, storage and sales.



It can be beneficial to have an outsider review and discuss the organic management system.

Record keeping is an important aspect of certified organic production. Management decisions are based on historical reference and knowledge




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Organic Production and Handling Requirements

Components of the Organic System Plan-written in the organic certification application.

- Practices
- Materials used
- Monitoring
- Recordkeeping
- Planting of organic seed
- Management and buffer zones



Records needed to illustrate activities on the farm that demonstrate operator complies with organic rules.



Completed the first year

3 YEAR FIELD HISTORY

Use a separate line for each field and list fields in order. Do not group fields on the same line unless the fields are directly adjacent to one field.

Office Use Only	Field #	Acres	Rent or Own	Crop	Seed variety and company & List any pesticides or seed treatments	Input levels as fertilizer, lime, weed or pest control products and material	Amount / Rates of input used	Input application dates	Year: 2015

Completed subsequent years

CROP SUMMARY / CURRENT YEAR FIELD PLAN

Name: _____ Year: _____


1. Complete the Current Year field plan (see next page) for all organic, transition and conventional land under your management.

2. Using the required data, fill in the table with the number of acres of certified seed type of crop and the date when "organic production" for your soil state or will reach a complete list of crop system including purchase, if you do, do not use the 3-year summary, submit & separate. In the Annual Report, list the program field for each crop.

CROP SUMMARY	NUMBER OF ACRES UNDER ORGANIC MANAGEMENT	ORGANIC ACRES	TRANSITION ACRES	CONVENTIONAL ACRES	AGRICULTURAL PRODUCTION YEAR	FOR WHICH THIS REPORT IS SUBMITTED

Definitions

➤ Organic production- A production system that is managed in accordance with the Act and regulations to respond to site-specific conditions by *integrating cultural, biological and mechanical practices* that *foster cycling of resources, promote ecological balance and conserve biodiversity.*




Transition period to organic

Land Requirements

- Fields must have distinct boundaries and buffer zones.
- No prohibited substances applied to it for a period of 36 months immediately preceding harvest of the crop.


Previously fallow land can grow an organic crop immediately: no waiting time.

All crops and livestock managed by farmer are not mandated to be organic.




This includes no use of nonapproved seed treatments for the transitional years.

Organic production mandates a soil building rotation, promoting improved soil fertility, soil structure and increased organic matter.

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Crop rotation.



The practice of alternating the annual crops grown on a specific field in a planned pattern or sequence in successive crop years so that crops of the same species or family are not grown repeatedly without interruption on the same field.

Perennial cropping systems employ means such as alley cropping, intercropping, and hedgerows to introduce biological diversity in lieu of crop rotation.

Soil Fertility and Crop Nutrient Practice Standard



MANURE---MUST be composted UNLESS it is

- Applied for a crop NOT for human consumption
- Soil incorporated not less than 120 days prior to the harvest whose edible portion is in contact with soil particles.
- Soil incorporated not less than 90 days prior to the harvest whose edible portion does not have direct contact with soil particles

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Organic issues to be tracked with manure

Under the "prevent contamination or application of prohibited substances to organic land"....

- No arsenic fed to poultry or hogs
- No synthetic substances added to manure pits to control odor
- No fly sprays on piles of solid manure
- No use of "factory farm" manure if crop is to be sold into the European Union.
- Documentation from supplier of manure should be present verifying compliance.
- Nonorganic carbon sources such as lawn clippings, hay, straw, and even GMO corn or soybean stalks are allowed under the USDA rule in raw manure or compost.

Compost defined as:
 Processed from plant and animal materials

- Initial Carbon:Nitrogen ratio between 25:1 to 40:1
- Temperature maintained between 131 and 170 degrees F for 15 days using a windrow that has been turned at least 5 times
- Temperature maintained between 131 and 170 degrees F for 3 days using an in-vessel or static aerated pile.



Processed manures that reach 165 degrees or 150 degrees for one hour or can be proven to contain less than 1000 most probable number (MPN) fecal coliform and 3 MPN Salmonella per 4 gram can be used with no restriction, the same as compost.

Materials and the National List


- All naturals approved
- All synthetics prohibited
- If a natural is on list, then prohibited
- If synthetic on list, then approved
- List is broken into crops, livestock and ingredients in processed products.

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NOT ALLOWED

- Genetically engineered products
- Grown with sewage sludge
- Irradiated

Synthetic substances unless specifically approved.....



Pest, weed and disease control hierarchy

1st: Cultural (crop rotation, sanitation, seed variety)
 Mechanical or physical (exclusion, beneficial insect habitat, lures, traps, repellants, mulches, flame)

2nd: Natural biological, botanical or mineral inputs

3rd: Approved synthetics on the national list-provided the CONDITIONS for use are DOCUMENTED and the previous 2 were ineffective

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SEEDS

**Certified organic seeds must be used, unless producer proves the seed they wish to use is not "commercially available".*

**Proof that the producer tried to obtain organic seed of an equivalent variety to desired type.*

**Phone logs, seed catalogs and letters from seed suppliers illustrating non-availability of organic seed are used.*

Farmers can also trial small amounts of organic seed to show they are researching equivalent varieties.

ORGANIC SEED SEARCH

Use this form to document your attempts to find three sources that carry organic seeds or planting stock. To secure organic seed or planting stock and have it available at your organic operation. Alternately, if you secure your seed or planting stock from elsewhere, you may have the address of your source complete the form organic seed or planting stock available for your inspector to use.

Variety & Crop Type	Company	Date Contacted	Describe why non-organic seed or planting stock was purchased	Year
			<input type="checkbox"/> Organic unavailable in the appropriate form, quality or quantity available for your operation.	
			<input type="checkbox"/> Varying preference (specific varietal characteristics)	
			Other:	

High price is not an acceptable reason to not buy organic seed.

Planting stock such as rhizomes, shoots, leaf or stem cuttings, roots, or tubers are treated like seeds for commercial availability (potatoes, sweet potato slips)



No captan, apron or other nonapproved seed treatments for three years.

No GMO nitrogen fixing bacteria allowed, nonGMO inoculants are allowed.

Cover crop seeds MUST be organic as well.

Annual transplants must be organic.



